AMENDMENTS TO THE CLAIMS

Please amend the claims as indicated below.

Sub D1

1. (Currently Amended) A method in a video decoding system for adapting to resource constraints, said method comprising steps of:

determining whether a resource constrained mode is to be initiated;

receiving video input comprising a first and second plurality of pictures; and

responsive to determining that the resource constrained mode is to be initiated,

initiating the resource constrained mode, including [foregoing decoding of portions of received video input.] :

foregoing decoding the first plurality of pictures; and

decoding the second plurality of pictures, wherein a designated display order of at least a portion of the first plurality of pictures overlaps a designated display order of at least a portion of the second plurality of pictures.

2. (Original) The method of claim 1, wherein the determining step includes determining that the resource constrained mode is to be initiated responsive to inadequate memory availability.

3. (Original) The method of claim 1, wherein the determining step includes determining that the resource constrained mode is to be initiated responsive to inadequate bus bandwidth availability.

4. (Original) The method of claim 1, wherein the determining step includes determining that the resource constrained mode is to be initiated responsive to user interaction.

5. (Previously Presented) The method of claim 4, wherein the resource constrained mode is one of a plurality of resource constrained modes determined by the user interaction.

6. (Previously Presented) The method of claim 4, wherein the user interaction includes causing the video decoding system to reduce spatial resolution of video output.

7. (Previously Presented) The method of claim 4, wherein the user interaction includes causing graphics to be generated and output along with the video output.

8. (Original) The method of claim 1 wherein the determining step includes determining that the resource constrained mode should be initiated responsive to receiving from a video transmitter data describing the received video input.

9. (Original) The method of claim 1, wherein the received video input is encoded using a Motion Picture Experts Group (MPEG) encoding scheme.

10. (Original) The method of claim 9, wherein the initiating step includes foregoing decoding of at least one bi-directional frame (B frame).

11. (Original) The method of claim 9, wherein the initiating step includes foregoing decoding of at least one predictive frame (P frame).

12. (Original) The method of claim 9, wherein the initiating step includes foregoing decoding of a plurality of frames, and wherein the method further comprises repeating presentations of decoded frames to a user in place of the plurality of frames that are not decoded.

Claims 13-21 (Cancelled)

22. (Original) The method of claim 1, wherein the initiating step includes maintaining existing resource priorities controlling devices using the resources.

23. (Original) The method of claim 1, wherein the determining and initiating steps are performed in a digital home communication terminal including an interrupt driven central processing unit that is notified when a resource becomes constrained.

24. (Original) The method of claim 1, wherein the initiating step includes continuing to present audio to a user at a regular rate and maintaining audio and video synchronization during the resource constrained mode.

25. (Original) The method of claim 1, further comprising a step of terminating the resource constrained mode responsive to determining adequate resource availability.

26. (Currently Amended) A video decoding system for adapting to resource constraints, said system comprising:

determination logic configured to determine whether a resource constrained mode is to be initiated; and

initiation logic configured to initiate the resource constrained mode responsive to the determination logic, including [foregoing decoding of portions of received video input.] :

foregoing decoding a first plurality of pictures corresponding to received video input; and

decoding a second plurality of pictures corresponding to the received video input, wherein a designated display order of at least a portion of the first plurality of pictures overlaps a designated display order of at least a portion of the second plurality of pictures.

27. (Original) The system of claim 26, wherein the determination logic is further configured to determine that the resource constrained mode is to be initiated responsive to inadequate memory availability.

28. (Original) The system of claim 26, wherein the determination logic is further configured to determine that the resource constrained mode is to be initiated responsive to inadequate bus bandwidth availability.

29. (Currently Amended) A video decoding method comprising the steps of:

determining that a video decoding rate of received video input [should] is to be reduced while maintaining synchronization with an unmodified audio decoding rate;

receiving video input comprising a first and second plurality of pictures; and

reducing the video decoding rate [accordingly] and maintaining said synchronization responsive to the step of determining that a video decoding rate is to be reduced, including:

foregoing decoding the first plurality of pictures; and

decoding the second plurality of pictures.

30. (Original) The method of claim 29, wherein the determining step is responsive to a step of determining that at least one resource is constrained.

Claim 31 (Cancelled).

32. (Currently Amended) A video decoding method comprising the steps of:

determining that at least one resource is constrained;

determining whether a picture repetition mode [should] is to be initiated;

receiving video input comprising a first and second plurality of pictures; and

initiating a mode of repeating pictures responsive to determining that the picture repetition mode [should] is to be initiated [; and] , including:

foregoing decoding the first plurality of pictures;

decoding the second plurality of pictures; and

outputting at least one of the second plurality of pictures a plurality of times;

wherein the determining step is responsive to [a] the step of determining that at least one resource is constrained.

33. (Previously Presented) The method of claim [1] 32, wherein the received video input has a first picture rate, and wherein an output video stream has a second picture rate that is higher than the first picture rate.

34. (Previously Presented) The method of claim 33, wherein a decoded picture is presented a plurality of times in place of a picture that is not decoded.

35. (Previously Presented) The method of claim 33, wherein a decoded picture is presented five times if a subsequent picture is not decoded.

36. (Previously Presented) The method of claim 35, wherein the first picture rate is 24 Hertz and the second picture rate is 60 Hertz.

37. (Currently Amended) [The method of claim 1, further comprising:]
A method in a video decoding system for adapting to resource constraints, said method comprising steps of:

determining whether a resource constrained mode is to be initiated;

responsive to determining that the resource constrained mode is to be initiated, initiating the resource constrained mode, including foregoing decoding of portions of received video input;

retrieving a first set of video data from a memory component, wherein the first set of video data corresponds to a first video picture;

scaling the first set of video data into a second set of video data corresponding to a second video picture that is smaller than the first video picture;

transmitting the second set of video data to a display device, wherein the second set of video data is not stored in the memory component prior to being transmitted; and

transmitting graphics data to the display device, wherein the graphics data is displayed contemporaneously with the second set of video data.

38. (Previously Presented) The method of claim 37, wherein the memory component stores compressed video data and decompressed video data.

39. (Previously Presented) The method of claim 38, wherein the memory component is coupled to a video decoder.

40. (Currently Amended) A method in a video decoding system for adapting to resource constraints, said method comprising steps of:

determining whether a resource constrained mode is to be initiated; and

responsive to determining that the resource constrained mode is to be initiated,

initiating the resource constrained mode, including [foregoing decoding of portions of received video input;] :

foregoing decoding a picture corresponding to received video input; and

decoding a picture corresponding to the received video input;

wherein the received video input has a first picture rate;

wherein an output video stream that includes the decoded picture has a second picture rate that is higher than the first picture rate; and

wherein [a] the decoded picture is presented a plurality of times in place of [a picture that is not decoded.] the picture for which decoding was forgone.

41. (Previously Presented) The method of claim 40, wherein a decoded picture is presented five times if a subsequent picture is not decoded.

42. (Previously Presented) The method of claim 41, wherein the first picture rate is 24 Hertz and the second picture rate is 60 Hertz.

43. (Previously Presented) The method of claim 1, further comprising:

providing an interlaced video picture output having a first set of display fields that is interlaced with a second set of display fields.

44. (Previously Presented) The method of claim 43, wherein the content of the second set of display fields is derived from the content of the first set of display fields in order to avoid jitter artifacts.

45. (Previously Presented) The method of claim 44, wherein the content of the second set of display fields is copied from the content of the first set of display fields.

46. (New) A method in a video decoding system for adapting to resource constraints, said method comprising steps of:

buffering in a first portion of a picture buffer at least a first picture corresponding to received video input;

decoding the at least first picture;

determining whether a resource constrained mode is to be initiated; and

responsive to determining that the resource constrained mode is to be initiated,

initiating the resource constrained mode, including:

foregoing decoding at least a second picture corresponding to the received video input; and

buffering graphical data in the first portion of the picture buffer.

47. (New) The method of claim 46, wherein the at least second picture is a bi-directional frame (B-frame).

48. (New) The method of claim 47, wherein the at least first picture is B-frame.

49. (New) The method of claim 46, wherein the at least first picture is output a plurality of times in place of the at least second picture.